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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,381	09/30/2003	Julie Y. Qian	SAM0017/US	3226

33072 7590 03/14/2006

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EXAMINER
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RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/676,381

Applicant(s)

QIAN ET AL.

Examiner

Christopher RoDee

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 February 2006 has been entered.

### ***Claim Rejections - 35 USC § 103***

Claims 1, 6-10, 14, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosel in US Patent 3,753,760 in view of Gibson in US Patent 4,891,286.

Claims 1, 6-10, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosel in US Patent 3,753,760 in view of Almog in US Patent 5,792,584.

These rejections were set forth in the prior Office actions and are incorporated here. Applicants traverse the instant rejections based on the amendments to the claims. In the amendments, applicants specify that the acid or base is an ingredient separate from the toner particles. Applicants stress that this limitation is effective to define over the art because none of the references discloses the addition of the acid or base in this manner. Additionally, Gibson only discloses the addition of acids to negatively charged toner particles and this addition is during the toner manufacturing process. The addition is before the charge director is added. With respect to Almog, applicants note that the solubilizable acids are mixed with the pigmented resin particles and further liquid hydrocarbon is added to the toner composition. The acid in

Art Unit: 1756

Almog, as in Gibson, is added to stabilize the negative charge directors and does not reduce bulk conductivity (response p. 7).

The Examiner has carefully considered applicants' remarks. Although in agreement that the Kosel does not disclose the addition of a separate acid or base component from the toner particles, the supporting Gibson reference discloses adding acid to produced toner particles in the Example. See column 6, line 60 through column 7, line 16 where 2.5  $\mu\text{m}$  toner particles are formed. Then, as described in column 7, lines 17-27, the toner particles are combined with a separate acid and mixed with more carrier liquid to form the toner. The insoluble acids are disclosed for use with negatively charged liquid toners (col. 5, l. 16-22; col. 6, l. 47-57). Applicants are correct that the amount of acid added to the toner is not disclosed as reducing bulk conductivity. However, as pointed out previously, this limitation is directed to a material amount of the acid added to the liquid toner. Applicants have not stated that the amount of the acid suggested for addition in Gibson is outside the scope of the claims. It appears that the amounts of the acid suggested by the art overlaps with the amounts specified by the claims noting column 6, lines 44-45.

With respect to the rejection in view of Almog, the acid is added as a separate component to the liquid toner composition. The first homogeneous liquid contains the liquid hydrocarbon, the charge director, and the stabilizing component, such as an acid. This liquid is mixed with thermoplastic resin particles (col. 3, l. 26-43). Clearly the acid is a separate component from the toner particles, and this meets the requirements of the new limitation added to claim 1. As with Gibson, applicants are correct that the amount of acid added to the toner is not disclosed as reducing bulk conductivity. However, the amounts of the acid suggested by Almog appear to overlap with those of the instant claims. Applicants have not specified otherwise.

Art Unit: 1756

The art is still seen as reasonably suggesting the claimed invention and the rejection is maintained.

Claims 1-5, 10-13, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosel in US Patent 3,753,760 in view of *Handbook of Imaging Materials* to Diamond & Weiss (eds.) New York: Marcel-Dekker, Inc. (11/2001) pp. 242-247, 254-257.

Claims 1-5, 10-13, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qian *et al.* in US Patent Application Publication 2004/0091807 or Qian *et al.* in US Patent Application Publication 2004/0091808 or Qian *et al.* in US Patent Application Publication 2004/0091809 in view of *Handbook of Imaging Materials* to Diamond & Weiss (eds.) New York: Marcel-Dekker, Inc. (11/2001) pp. 242-247, 254-257.

Claims 1-5, 10-13, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison *et al.* in US Patent Application Publication 2003/0134940 in view of *Handbook of Imaging Materials* to Diamond & Weiss (eds.) New York: Marcel-Dekker, Inc. (11/2001) pp. 242-247, 254-257.

These rejections were set forth in the prior Office actions. The previously presented remarks are incorporated here. Applicants traverse the rejections because the primary references do not disclose the claimed charge control adjuvant while the applied text describes the use of a charge director to impart a charge on the particle and does not teach the use of a separate acid or base in an amount effective to reduce bulk conductivity. A review of the Diamond text does show that the addition of a separate acid or base is shown to be effective to give the desired charge on the toner particle. Although this component may be described as a charge director by the Diamond text, that description is not sufficient to remove the reference. The instant claims do not specify separate charge directors and charge control adjuvant(s). The

Art Unit: 1756

claims require a liquid carrier, negatively charge toner particles, and a charge control agent. Because the reference discloses both acid(s) and base(s) as effective additives to give the desired charge and discloses these components as separate (e.g., p. 244, 2<sup>nd</sup> paragraph) as well as disclosing toner particles and a liquid carrier, it appears that the acid or base meets the requirements of the claims. The artisan would have found it obvious to optimize the amounts of the components in order to obtain the results described by Diamond, particularly in view of the effective amounts shown.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr  
13 March 2006



CHRISTOPHER RODEE  
PRIMARY EXAMINER